



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0330; Directorate Identifier 2008-NE-43-AD]

RIN 2120-AA64

Airworthiness Directives; Turbomeca S.A. Turboshaft Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to supersede an existing airworthiness directive (AD) that applies to Turbomeca S.A. Arrius 2F turboshaft engines with P3 air pipe (first section) part number (P/N) 0 319 71 918 0, installed. The existing AD currently requires inspections of the P3 air pipe (first section) and right-hand (RH) rear half-wall for proper clearance, and readjustment of the pipe if necessary. Since we issued that AD, Turbomeca S.A. has redesigned the RH rear half-wall to ensure sufficient clearance between the P3 air pipe (first section) and RH rear half-wall. This proposed AD would require the same inspections for installed engines, eliminate readjusting of the P3 air pipe (first section), require replacement of the RH rear half-wall under certain conditions, and adding an optional terminating action. We are proposing this AD to prevent an uncommanded power loss to flight idle, which could result in an emergency autorotation landing or accident.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this AD, contact Turbomeca, 40220 Tarnos, France; phone: 33 (0)5 59 74 40 00; telex 570 042; fax 33 (0)5 59 74 45 15. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Mark Riley, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7758; fax: 781-238-7199; e-mail: mark.riley@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section.

Include “Docket No. FAA-2009-0330; Directorate Identifier 2008-NE-43-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

On June 30, 2009, we issued AD 2009-14-11, Amendment 39-15961 (74 FR 34221, July 15, 2009), for Turbomeca S.A. Arrius 2F turboshaft engines with P3 air pipe (first section), P/N 0 319 71 918 0, installed. That AD requires inspections of the P3 air pipe (first section) and RH rear half-wall for sufficient clearance. That AD resulted from Turbomeca S.A. concluding that the tolerance of assembly established during the system design, could result in some rubbing between parts. Rubs between the pipe and the RH rear half-wall may lead to premature wearing and finally rupture of the P3 air pipe (first section). The loss of P3 air pressure would then force the fuel control system to idle, which could have a detrimental effect in critical phases of flight. We issued that AD to prevent an uncommanded power loss, which could result in an emergency autorotation landing or accident.

Actions Since Existing AD Was Issued

Since we issued AD 2009-14-11 (74 FR 34221, July 15, 2009), Turbomeca determined that the clearance between the P3 air pipe (first section) and the RH rear half-wall might change during installation of the engine on the helicopter. Also since we issued that AD, Turbomeca introduced a new redesigned RH rear half-wall that ensures

clearance with the P3 air pipe (first section). Also since we issued that AD, the European Aviation Safety Agency (EASA) superseded AD 2008-0134R1, dated February 17, 2009, EASA's new AD, AD 2011-0182, dated September 22, 2011, required the same corrective actions as this proposed AD.

Relevant Service Information

We reviewed Turbomeca S.A. Mandatory Service Bulletin (MSB) No. 319 75 4810, Version B, dated January 25, 2011. The MSB describes procedures for inspecting the clearance between the P3 air pipe (first section) and the RH rear half-wall. The MSB also requires replacing the RH rear half-wall with a redesigned RH rear half-wall, P/N 0319 99 008 0 for engines with no clearance between the P3 air pipe (first section) and the RH rear half-wall. Also, installation of the redesigned RH rear half-wall on any engine is terminating action to the inspections. EASA classified the MSB as mandatory and issued AD 2011-0182, dated September 22, 2011.

FAA's Determination

We are proposing this AD supersedure, because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require inspections of the clearance between the P3 air pipe (first section) and RH rear half-wall for installed engines with RH rear half-wall, P/N 0319 99 824 0. This proposed AD would also eliminate readjustment of the P3 air pipe (first section), and define installation of the redesigned RH rear half-wall as optional terminating action to the inspections.

Costs of Compliance

We estimate that this proposed AD would affect about 120 Arrius 2F turboshaft engines installed on helicopters of U.S. registry. We also estimate that it would take

about 2 work-hours per engine to comply with this proposed AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$2,565 per engine. Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be \$328,200. Our cost estimate is exclusive of possible warranty coverage.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that the proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2009-14-11, Amendment 39-15961 (74 FR 34221), and adding the following new AD:

Turbomeca S.A.: Docket No. FAA-2009-0330; Directorate Identifier 2008-NE-43-AD.

(a) Comments Due Date

The FAA must receive comments on this AD action by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2009-14-11, Amendment 39-15961 (74 FR 34221, July 15, 2009).

(c) Applicability

This AD applies to Turbomeca S.A. Arrius 2F turboshaft engines with right-hand (RH) rear half-wall, part number (P/N) 0319 99 824 0, installed.

(d) Unsafe Condition

The P3 air pipe (first section) and the RH rear half-wall could rub each other. Rubbing between the pipe and the RH rear half-wall may lead to rupture of the P3 air pipe (first section), which could cause an uncommanded power loss to flight idle. We are issuing this AD to prevent an uncommanded power loss to flight idle, which could result in an emergency autorotation landing or accident.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) For installed engines, within 100 engine hours (EH) after the effective date of this AD:

(i) Inspect the clearance between the P3 air pipe (first section) and the RH rear half-wall for sufficient clearance (0.5 mm or more).

(ii) Use paragraph 2.B.(1) of Turbomeca Mandatory Service Bulletin (MSB) No. 319 75 4810, Version B, dated January 25, 2011 to do the inspection.

(2) Thereafter, repeat the inspections in paragraphs (e)(1)(i) through (e)(1)(ii) of this AD as follows:

(i) At every installation of a RH rear half-wall P/N 0 319 99 824 0 on an installed engine, and

(ii) After every installation or reinstallation of an engine with a RH rear half-wall P/N 0 319 99 824 0 installed.

(3) If the P3 air pipe (first section) or the RH rear half-wall P/N 0 319 99 824 0 is found damaged, then before further flight, replace the damaged part(s) with parts eligible for installation.

(4) If the P3 air pipe (first section) and the RH rear half-wall P/N 0 319 99 824 0 are found contacting each other but are not damaged, replace the RH rear half-wall with a RH rear half-wall eligible for installation.

(5) If both the P3 air pipe (first section) and the RH rear half-wall are found not damaged during the inspections specified in paragraph (e)(1) or (e)(2) of this AD, and the clearance between them is less than 0.5 mm, but they are not contacting each other, then repeat the inspection in paragraphs (e)(1)(i) and (e)(1)(ii) of this AD within every 100 EH.

(6) Installation of RH rear half-wall, P/N 0 319 99 008 0, is terminating action to the inspections required by paragraph (e) of this AD.

(7) Once a RH rear half-wall, P/N 0 319 99 008 0, is installed on an engine, do not install a RH rear half-wall, P/N 0 319 99 824 0, on that engine.

(f) Definition

For the purpose of this AD, parts eligible for installation is defined as:

- (1) An undamaged P3 air pipe (first section).
- (2) An undamaged RH rear half-wall P/N 0 319 99 824 0.
- (3) A new design RH rear half-wall P/N 0 319 99 008 0.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve alternative methods of compliance for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(h) Related Information

(1) For more information about this AD, contact Mark Riley, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7758; fax: 781-238-7199; e-mail: mark.riley@faa.gov.

(2) European Aviation Safety Agency AD 2011-0182, dated September 22, 2011, pertains to the subject of this AD.

(3) For service information identified in this AD, contact Turbomeca, 40220 Tarnos, France; telephone 33 (0)5 59 74 40 00; telex 570 042; fax 33 (0)5 59 74 45 15. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on December 5, 2011.

Peter A. White,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2011-31798 Filed 12/12/2011 at 8:45 am; Publication Date: 12/13/2011]